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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,766	09/05/2003	Jonathan Westphal	80006	6894
27975	7590	03/21/2006	EXAMINER	
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A. 1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE P.O. BOX 3791 ORLANDO, FL 32802-3791			SIEK, VUTHE	
			ART UNIT	PAPER NUMBER
			2825	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/655,766	WESTPHAL, JONATHAN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Vuthe Siek	2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                        |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

### **DETAILED ACTION**

1. This office action is in response to application 10/655,766 and request for reconsideration under 37 CFR 1.116 with declaration under 37 CFR 1.132 filed on 3/6/06. Claims 1-12 remain pending in the application.
2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a system/apparatus/compute program product having a computer [having computer readable storage medium] must be shown on drawings. No new matter should be entered. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:  
  
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
5. Claims 1-2, 5-7, 8 and 9 are rejected under 35 U.S.C. 101 because the claimed invention are not supported by either a credible asserted utility or a well established utility.

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6. The claims refer to software stored on a computer [should be a computer readable storage medium] for the steps of a process. Examiner recognized that the claims 1, 5, 8 and 9 have a computer, software and processed steps. However, there are no tangible result has been produced because there is no interaction between the software and the computer. When the computer readable storage medium stored software does not cause the computer to perform the processed steps, a specific and tangible result will never be produced. Therefore, the claimed invention are not supported by either a credible asserted utility or well established utility. In addition, without claiming execution part of the computer or causing the computer to execute or perform the processed steps or do something, a tangible result will never be produced. As a result the claimed invention are not supported by either a credible asserted utility or a well established utility.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 5-7, 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural/functional cooperative relationships of elements, such omission amounting to a gap between the necessary structural/functional connections. See MPEP § 2172.01. The omitted structural/functional cooperative relationships are: the software stored on a computer readable medium [be more specific) causing the computer to perform the processed steps or causing the computer to execute the processed steps. Without

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structural/functional connections as described or without the computer readable medium having instructions to instruct or command the computer to perform the processed steps, there is no structural/functional connections between the software, computer and the processed steps. Thus, the claims lack necessary structural/functional relationships or connections.

Claims 1, 5 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: "eliminating opposing couples". Examiner believes that this step is necessary and essential to practice the claimed invention (simplifying the multilevel logic schema into a simplified form). Applicant is requested to assert or have statement that this step is not necessary to simplify the multilevel logic schema, if Applicant does not agree with Examiner. Claims 2 and 6-7 are also virtually rejected based on the rejected based claims.

### ***Double Patenting***

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-13 of copending Application No. 10/931,456 (US 2005/0091617 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because the both applications claiming the same subject matter except an integrated circuit having multiple outputs. Note that a complex IC design has multiple outputs. Therefore, it would have been obvious to practitioners in the art to apply the claim invention in the complex IC having single output and multiple outputs.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Allowable Subject Matter***

10. Claims 3-4 and 10-12 would be allowable over the prior art of record with the exception of double patenting rejection. The prior art of record does not teach or suggest a method of reducing multilevel logic schema to simpler form comprising the steps of representing the logic in vector form representation and removing redundancy by eliminating opposing couples (referred to vectors in the vector form representation).

11. Claims 1-2 and 5-9 would be allowed over the prior art of record with the exception of double patenting rejection and if rewritten to overcome 112, 2<sup>nd</sup> paragraph rejection above.

***Remarks***

The declaration under 37 CFR 1.132 filed on 3/6/06 is sufficient to overcome the rejection of claims 1-12. The declaration on 3/6/06 and arguments filed on 9/6/05 have been persuasive. Examiner thank Applicant's representative for copy document including In re Beauregard (CAFC) 35 USPQ2d 1383 (in U.S. Patent 5,710,578). Examiner reviewed Beauregard's claims. The claims are different from the claims in the instant application. The claims in Beauregard have interaction between the computer and a computer readable medium (computer readable program code means for causing the computer to...) and processed steps. Without phrase "causing a computer to perform something, or effect the processed steps", there is no tangible result or a credible asserted utility or a well established utility. Without these clauses (causing the computer to...) in the claims, Examiner believes that structural/functional connections are missing. During the interview on 3/13/06, Applicant's representative asserted that the software stored on a computer does not need to do anything or execution part of the computer is not necessary and the claims at issue are still statutory. Examiner believes that when the claims are missing structural/functional connections (for example clause: a computer readable medium having a computer readable program code embodied thereon to cause a computer to...[processed steps]), a specific and tangible result will never be produced. As a result, therefore, the claimed invention is not supported by either a credible asserted utility or a well established utility. In addition, Examiner interpreted the clause: "for..." in the claims followed by the processed steps, is not the

same as "structural/functional connections" as described above because the "for" clause does mean that the actual processed steps are performed or executed.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vuthe Siek whose telephone number is (571) 272-1906.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on (571) 272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vuthe Siek

  
VUTHE SIEK  
PRIMARY EXAMINER